Self-Regulated Strategies Chinese Graduate Students Employ to Learn English at Three American Universities

Wen Ma

Le Moyne College

Chuang Wang

University of North Carolina at Charlotte

Abstract

International students in the United States often employ culture-specific learning strategies to help them improve their proficiency in English. This study explored the use of self-regulated strategies by 49 Chinese graduate students from 24 fields of study at three universities in the Northeast. The research used the mixed survey method to generate both quantitative and qualitative data. The findings reveal what strategies are commonly used by the participants, whether there is any difference in strategy choice between male and female students, whether there is any difference in strategy choice between doctoral and Master's students, as well as how these advanced students perceive and articulate their experiences to learn English in a U.S. context. The results may have both theoretical and practical implications, especially for their American professors, other Chinese graduate students, and English language education in China.

According to the *Open Doors* report, in the 2009-2010 academic year, there were as many as 127,628 students (the majority of whom were graduate students) from China studying at various universities in the United States, making up 18.5% of the total

international student population (Institute of International Education, 2010). Given that Chinese culture, language and education are distinctly different from those in the United States, it is no small undertaking to pursue rigorous graduate-level study, using a working language that is not their native tongue. Therefore, it is imperative for the Chinese graduate students and their American professors, as well as those concerned with the conditions of this significant cohort of non-native learners, to better understand how they self-initiate learning strategies to sharpen their English skills so that they may read the textbooks, write academic papers, speak in class discussions or presentations, and listen to and interact with other native-born peers.

This study used a mixed survey method to explore the learning strategies a diverse group of Chinese graduate students use to study English at three American universities. Specifically, the study addressed these four research questions: 1. What are the common learning strategies implemented by these Chinese graduate students? 2. How do the male and the female students compare in their strategy choice? 3. How do the doctoral students and the master's students compare in their strategy choice? 4. How do they articulate their experience learning English as a unique cohort of international students in the United States?

Theoretical Framework

This study is informed by research on Chinese students studying at various American universities, and research on self-regulated learning strategies.

Research on Chinese Students in the United States

Comparative educational studies suggest that education in China and in the United States follows different theoretical orientations and instructional practices. According to

Stevenson and Stigler (2006), the classroom practices in the United States tend to emphasize the learner's personal abilities, interests and needs, and the Chinese practices stress more teacher-directed, textbook-based and test-oriented learning activities, memorization of foundational knowledge, reflective listening and thinking, and strong discipline and work ethic. Watkins and Biggs (1996; 2001) referred to the latter as Confucian-heritage learning culture.

China's national college entrance examination (*Gaokao*) system has also affected its current educational thinking and practices. Because of the system, instead of learner-centered teaching and learning activities, tests are built into the classroom instruction of every core curricular area and they may unduly influence many aspects of instruction (Ma, 2010; Zhao, 2009). As a result, students who reach college and graduate levels have passed a multitude of tests. Those coming to study at various American universities are no exception to such test-oriented learning experience, and they often intuitively know how to strategize to get good grades at school. Still, as international students in the United States, they inevitably face many obstacles studying in a foreign setting. In particular, they need not only to switch from Chinese to thinking, learning and interacting in English, but also to adapt some of their culturally shaped beliefs and practices to the new environment, which may create further challenges as they make the transition from a more teacher-directed, content-based approach to a more student-centered, participatory approach more prevalent in an American educational context.

Previous research on Chinese college and graduate students in the United States has explored their unique learning experience, academic discourse, and acculturation issues. For example, as early as sixty years ago, Wong (1950) self-examined her learning

experience at an all-girl college in California. Coming from a Chinese background and accustomed to learning through listening to lectures and taking notes, Wong remained a spectator in class discussions just "watching and listening with wonder to catch every movement and sound of these Caucasian girls who participated so easily in the college scene, who absorbed and contributed" (p. 166). Paradoxically, while at a disadvantage as a non-native speaker of English, Wong managed to cope with the academic challenges through hard work and careful listening, and in the end it was her paper that was selected as exemplary work and presented at an English conference.

More recently, Wu and Rubin (2000) compared the impact of Confucian orientation and American orientation on argumentative writing by 80 Chinese and American undergraduates. They found that the Chinese students' command of English clearly affected their level of assertiveness in writing, and their writing was "characterized by relative indirectness, by expressions of Confucian principles of humaneness and collective virtue, and by a greater reliance on proverbs and other canonical expressions. American students, in contrast, included more self-disclosure through the medium of personal anecdotes" (p. 165). Furthermore, Prior's (1998) series of case studies showed how Chinese and other graduate students engaged in what he called *disciplinary enculturation* through writing academic papers and interacting with their peers and professors.

Research on Self-Regulated Learning Strategies

Studies of language learning process and strategy use were not new with elementary school students (e.g., Abraham & Vann, 1987; Chamot & El-Dinary, 1999; Wang, Quach, & Rolston, 2009). High-achieving elementary school students used a greater proportion of meta-cognitive strategies whereas low-achieving elementary school students

used a greater proportion of cognitive strategies (Chamot & El-Dinary, 1999). For example, low achieving students relied extensively on decoding of words (also known as bottom-up processing) but high achieving students used background knowledge (also known as top-down processing) to understand in reading. These results were echoed in studies of college students (Holschuh & Aultman, 2008; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). Instruments to measure language learning strategies (e.g., Strategy Inventory for Language Learning) and cross-cultural comparisons were also conducted (Oxford, 1990; Oxford & Burry-Stock, 1995; Oxford, 2011). However, very few studies were targeted toward more advanced international students in the U.S. classrooms.

Building on the work of Bandura (1986) and others, Zimmerman and Martinez-Pons (1986) developed 14 categories of self-regulated learning (SRL) strategies using data collected from middle school students. These classes include: self-evaluation, organizing and transforming, goal setting and planning, seeking information, keeping records and monitoring, environmental structuring, self-consequences, rehearsing and memorizing, seeking peer assistance, seeking teacher assistance, seeking adult assistance, reviewing tests, reviewing notes, and reviewing texts. Pape and Wang (2003) then merged the subcategories of seeking social assistance (i.e., from peers, teachers, and adults) and the subcategories of reviewing records (i.e., from tests, notes, and texts). Environmental structuring was split into physical environmental structuring and attention control. These changes resulted in a more parsimonious 11 category scheme. Schunk and Zimmerman (1997) argue that the development of self-regulation is dependent upon social, environmental, and behavioral triadic influences and that there are four levels of development: observation, imitation, self-control, and self-regulation. From a sociocultural

perspective, self-regulation is understood as a person's ability to plan, guide, and monitor his or her behavior from within and flexibly according to changing circumstances (Diaz, Neal, & Amaya-Williams, 1990). Self-regulated learners actively participate in their own learning (Griffiths, 2008), set goals for themselves and assess their process to achieve the goals (Wang et al., 2009), choose appropriate strategies through evaluating the setting, purposes, and learning styles (Cohen & Macaro, 2007; Ehrman, Leaver, & Oxford, 2003), and self-consciously regulate their cognitive, affective, and sociocultural interactive strategies in order to achieve the goals (Oxford, 2011).

In particular, Oxford (2011) included SRL strategies in her strategic self-regulation (S^2R) model and identified nine uniqueness of her model: (a) integration of psychological, sociocognitive, and sociocultural theories; (b) a balance of cognition, meta-cognition, emotion, attitudes, motivation, sociocultural relationship, personal interactions, and power dynamics; (c) meta-strategies which includes not only meta-cognitive but also meta-affective and meta-sociocultural interactive strategies; (d) meta-strategies can be used at either the task or the whole-process level; (e) underscores the importance of deep processing strategies; (f) strategies can be sued in ordinary learning situations as well as severe or crisis-like learning problems; (g) it is parsimonious with only 19 strategies and meta-strategies; (h) pays attention to the neurological elements and the cognitive demand of second language learning; and (i) embraces valuable techniques for assessing second language learning strategies and assisting learners in expanding their strategy repertoire.

Following Oxford's (2011) S^2R model, this study examined what language-learning strategies Chinese graduate students choose to use on their own, and how they work to implement SRL strategies to improve their English skills in order to cope with their

disciplinary programs of study. As studies on language learning strategies called for the inclusion of gender (Bremner, 1999; Dreyer & Oxford, 1996; Foong & Goh, 1997; Green & Oxford, 1995; Nisbet, Tindall, & Arroyo, 2005) and gender differences were found in a few studies (Kissau, Quach, & Wang, 2009; 2010), we also included gender as an independent variable. As doctoral students are more developed in meta-cognition and are more experiences in social interaction and psychological affective strategies, we were also interested if their use of SRL strategies differs.

Methods

This research used the mixed survey design with which both qualitative and quantitative data were collected at the same time (Creswell, 2008). The participants were selected using the volunteer sampling method (Gall, Gall, & Borg, 2010). Eighty graduate students from Chinese backgrounds were randomly selected from thirty disciplinary fields at three research universities, which are located in one medium-sized city and one small city in the Northeast of the U.S.

The primary source of data was a survey. In developing the quantitative portion of the survey, we drew on Oxford's (1990) six categories of language learning strategies and Wang's (2004) learning strategy protocols used for elementary English learners. Importantly, as the present study aimed to probe the Chinese graduate students' unstructured strategy use to learn English so that they can better cope with their disciplinary areas of study, the strategies being used need to be self-initiated and implemented rather than through explicit ESL instruction. The survey contained 40 statements of different learning strategies, and each participant was asked to rate his or her choice of the strategies on a scale of four: 1 being "I never use it;" 2 being "I seldom use

it;" 3 being "I sometimes use it;" 4 being I often use it." In addition to the 40 statements, there is a qualitative portion in the survey, which consists of three open-ended survey questions (see the Appendix). Both parts center on the participants' more spontaneous use and experience of learning strategies to help them learn English in a U.S. context.

The purpose of the study was explained to the participants first. With their consent, a hard copy of the survey in a stamped, addressed envelope was provided to each participant for him or her to mail back upon completion within three weeks. In the end, 49 completed surveys from 23 Master's students, 24 doctoral students, and two post-doctoral researchers were received; the return rate is 61.25%. Of the 49 participants who came from 24 graduate fields of study, 25 are male, and 24 are female students. For data analysis purpose, the two postdoctoral researchers were grouped together with the doctoral students.

A content analysis method was used to analyze the qualitative portion of the data (i.e., responses to the three open-ended questions). For the quantitative portion (i.e., the 40 strategies), the SPSS program was used for statistical analysis. Specifically, every participant's choices of the 40 strategies, as well as other participant information (e.g., gender, years of stay in the United States, and area and degree of study), were entered into the SPSS program, which was run to generate the means and standard deviations for each strategy choice. Analysis of variance (ANOVA) was employed to examine differences of the strategy use between groups of participants. The confidence level chosen for the statistical test was 95%, and the effect size reported in this study was η^2. According to Cohen (1988), the effect size is considered small if $\eta^2 = .01$; medium if $\eta^2 = .06$; and large if $\eta^2 = .15$. Finally, the qualitative and quantitative analyses were cross-referenced for triangulation. The

results are presented below.

Results

The data analyses yielded mixed results about these graduate students' self-regulated strategy use and their English proficiency. Regarding the first research question (*What are the most common learning strategies self-implemented by these Chinese graduate students in the U.S.?*), these four most frequently used strategies are: 1. Strategy #40, "I talk back in English when someone speaks English to me" (M = 3.89, SD = 0.46); 2. Strategy #4, "I take course notes in English" (M = 3.63, SD = 0.76); 3. Strategy #5, "I keep reading even when I encounter difficulties in my reading" (M = 3.51, SD = 0.54); and 4. Strategy #11, "I guess the meaning of new words by considering their contexts" (M = 3.49, SD = 0.74). More detailed descriptive statistics are shown in Table 1. (see the Appendix)

In comparison with the above frequently used strategies, the least commonly used strategies include the following ones: 1. Strategy #16, "I use Chinese symbols to mark the pronunciation of difficult English words" (M = 1.39, SD = 0.79); 2. Strategy #38, "I keep a personal journal in English" (M = 1.96, SD = 0.96); 3. Strategy #1, "I write down the mistakes I make in my use of English" (M = 2.00, SD = 0.87); 4. Strategy #9, "I listen to tape-recording of an English text several times if I cannot understand it for the first time" (M = 2.06, SD = 0.94).

The two-way ANOVA did not show a statistically significant interaction effect between gender and degree of study, $F(1, 45) = 0.02$, $p = .90$, $\eta^2 < .001$. As a result, each main effect was examined. For the second research question (*How do the male and the female students compare in their strategy choice?*), no statistically significant difference was noticed between male (M = 2.86, SD = 0.29) and female students (M = 3.00, SD = 0.35)

regarding their strategy choice, $F(1, 45) = 2.13$, $p = .15$, $\eta^2 = .05$. Multiple comparisons between male and female participants on each of the 40 items on the strategy survey also failed to detect any statistically significant differences ($p > .05$).

For the third question (*How the doctoral students and the master's students compare in their strategy choice?*), no statistically significant difference was found between Master's ($M = 2.96$, $SD = 0.37$) and doctoral students ($M = 2.90$, $SD = 0.28$) in their strategy choices, $F(1, 45) = 0.07$, $p = .15$, $\eta^2 = .001$. Multiple comparisons between doctoral and master students on each of the 40 items on the strategy survey also failed to detect any statistically significant differences ($p > .05$).

As with the fourth research question (*How do they articulate their experience learning English as a unique cohort of international students in the U.S.?*), the qualitative data reveal the participants' varied experiences and perspectives on studying and using English, ranging from their difficulties in fully participating in class discussions, issues with academic writing, and isolations from taking part in any sociocultural activities outside of studies. The most common frustration expressed by the respondents was that their poor English often kept them from writing strong academic papers, making clear and clean class presentations, or exhibiting their full academic capacity and sophisticated thinking. Many participants indicated that they used simple words, short sentence structures, and familiar (yet less colorful) expressions to write reports because of fear to make grammatical mistakes. Several respondents also felt it hard to make personal friends with other native students. For instance, one male Master's student admitted that "my spoken English is adequate for a general conversation, but [it is] not enough for an in-depth discussion with native speakers in class." There can be covert hurdles for communication, too. As

experienced by one female Master's student, "I am good at daily talk, but I have to organize the words in my head before speaking them out in formal discussions. Especially in dealing with academic situations, I tend to get nervous and forget what to say." One female doctoral student wanted to be able to speak accurately and vividly, not to sound like reading from a book. One respondent's remark seemed to have captured a collective sentiment of the group: "English becomes a bottleneck of both my social life and academic life."

The findings also show many of the respondents took painstaking efforts to work on their English skills, on top of dealing with their disciplinary studies. Some reported to have coped with their low English proficiency by copying common English idioms and key terms for memorization, visiting the Writing Center to have their academic papers edited, or using intensive reading method to better comprehend an assigned article or book chapter before leading a discussion about its content in class. Additionally, several respondents tried watching TV, practicing with native speakers, and improving comprehension through reading books. Another respondent wanted to read news in English, instead of Chinese. One female Master's student even desired to take some academic writing and/or communication courses to sharpen her skills for spoken English and class presentation.

Discussion

Consistent with Nisbet et al.'s (2005) research, this study failed to see statistically significant differences of the SRL strategy use between male and female students. As gender differences were found between male and female students in Green and Oxford's (1995) study with respect to strategy use and in Kissau et al.'s (2009; 2010) study with respect to motivation to learn a second language, future research should keep investigating gender differences. Our study also failed to find any statistically significant differences

between doctoral and master students in their strategy use, and most previous studies always grouped these students together (e.g., Kim, Wang, & Ng, 2010), it might not be worthwhile to separate doctoral and master students in future studies.

As reflected by the above findings, the participants faced many language obstacles studying in a non-native environment. This is not unlike the linguistic challenges confronting graduate students from Japanese, Korean and other linguistic and cultural backgrounds (Ma, 2008; Morita, 2000). In order to cope with the inevitable academic challenges, these advanced students resorted, one way or another, to some familiar learning practices. Meanwhile, they have to switch from their first language to thinking, learning and interacting in a new language, further complicating their learning, thinking, and participation in their studies. As intellectually sophisticated and resourceful learners, many of them compensated for their linguistic inadequacy largely by working harder and by using various known learning strategies from their prior English-learning experiences in China. The findings of this study help us better understand how they employ various self-regulated strategies to better their English skills in the United States.

These findings have implications for the mainstream educational community and for other Chinese students currently studying in the United States or planning to embark such educational journeys. It seems obvious that just memorizing many English words or a set of grammatical rules for sentence structures, helpful as they are, is simply not enough. In order to be able to deal with the academic challenges and participate actively in the learning processes, all non-native speakers of English really need to pay close attention to and acquire actual skills in using English for real-life communication. Self-regulated learning strategies, as Oxford's (2011) recent work emphasizes, are critical to continue

improving English learners' proficiency.

These findings may inform educators and researchers who have invested interest in Chinese students' English and educational development in the United States. Clearly, knowing what strategies these graduate students use to cope with their studies in English is only a beginning step. With more such research, it is possible to build a bigger collection of proven learning strategies for Chinese students in the United States. In addition, any innovative measures that effectively improve their linguistic proficiency would be helpful to maximize their learning, thinking, and understanding in science, technology, engineering, mathematics (STEM) and other disciplinary areas.

Perhaps some lessons may be learned for the English language education enterprise in China as well. As described in the in the literature review (cf. Ma, 2010; Zhao, 2009), classroom teaching and learning in China is heavily teacher-directed and test-oriented, where all kinds of standardized examinations dominate the curriculum. It is the same with English instruction, from the National College Entrance Examination in English (*Gaokao*) to the Band Four and Band Six English Test at the college and graduate levels. It seems obvious that the student's ability to actually use English, not static English usage, or test-taking skills, is what matters ultimately. In spite of their overall strong performance in various disciplinary fields, the evidence that so many Chinese students find it difficult to read English texts critically, write reports analytically, present ideas clearly or engage in discussions suggests that the English curriculum and instruction in Chinese schools need to be reformed.

Finally, some limitations must be acknowledged. Firstly, because this study involved a relatively small number of participants, one can only cautiously consider the extent to

which the strategy use may be linked to other students from China. Secondly, as graduate students come from many fields of study and in vastly different settings, the self-regulated strategy use may change as they gain more experience in the United States. Moreover, relying on surveys may not be adequate; other sources of data (e.g., field observations, follow-up interviews, and artifacts) may add valuable information to better understand not only what is reported by the participants, but also how they actually employ various strategies for real-life communication.

Future studies need to expand the scope (e.g., to include more participants), length of investigation (e.g., to conduct more than one survey over time), as well as to adopt multiple theoretical lenses to reflect a broader range of participant diversity and methodological complexity in order to depict a more holistic and dynamic picture of Chinese graduate student's SRL strategies for English and other disciplinary areas in the United States.

References

Abraham, R. G., & Vann, R. J. (1987). Strategies of two language learners: A case study. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp.133-144). Englewood Cliffs, NJ: Prentice/Hall International.

Bandura, A. (1986). *Social foundations of thought and action.* Englewood Cliffs, NJ: Prentice-Hall.

Bremner, S. (1999). Language learning strategies and language proficiency: Investigating the relationship in Hong Kong. *Canadian Modern Language Review, 55,* 490-514.

Chamot, A. U., & El-Dinary, P. B. (1999). Children's learning strategies in language immersion classrooms. *The Modern Language Journal, 83,* 319-338.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Cohen, A. D., & Macaro, E. *Language learner strategies: Thirty years of research and practice.* Oxford, UK: Oxford University Press.

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Diaz, R. M., Neal, C. J., & Amaya-Williams, M. (1990). The social origins of self-regulation. In L. C. Moll (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology (pp.127-154).* New York: Cambridge University Press.

Dreyer, C., & Oxford, R. L. (1996). Learning strategies and other predictors of ESL proficiency among Afrikaans speakers in South Africa. In R. L. Oxford (Ed.),

Language learning strategies around the world: Cross-cultural perspectives (pp. 61-74). Honolulu, HI: University of Hawaii at Manoa.

Ehrman, M. E., Leaver, B. L., & Oxford, R. L. (2003). A brief overview of individual differences in language learning. *System, 31,* 313-330.

Foong, K. P., & Goh, C. M. (1997). Chinese ESL students' learning strategies: A look at frequency, proficiency, and gender. *Hong Kong Journal of Applied Linguistics, 2*(1), 39-53.

Gall, M. D., Gall, J. P., & Borg, W. R. (2010). *Applying educational research* (6th ed.). Boston: Allyn and Bacon.

Green, J. M., & Oxford, R. L. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly, 29,* 261-297.

Griffiths, C. (2008). *Lessons from good language learners.* Cambridge, UK: Cambridge University Press.

Holschuh, J. P., & Aultman, L. P. (2008). Comprehension development. In Flippo, R. F. & Caverly, D. C. (Eds.), *Handbook of college reading and study strategy research* (pp. 121-144). London, UK: Routledge.

Institute of International Education. (2010). *Open doors 2010*. Retrieved from http://www.iie.org/en/Research-and-Publications/Open-Doors

Kim, D. H., Wang, C., & Ng, K. M. (2010). A Rasch rating scale modeling of the Schutte self-report emotional intelligence scale in a sample of international students. *Assessment, 17,* 484-496.

Kissau, S., Kolano, L., & Wang, C. (2010). Perceptions of gender differences in high school students' motivation to learn Spanish. *Foreign Language Annals*, *43*, 703-721.

Kissau, S., Quach, L., & Wang, C. (2009). The impact of single-sex instruction on student motivation to learn Spanish. *Canadian Journal of Applied Linguistics*, 12 (2), 54-78.

Ma, W. (2008). Participatory dialogue and participatory learning in a discussion-based graduate seminar. *Journal of Literacy Research, 40*, 220-249.

Ma, W. (2010). Bumpy journeys: A young Chinese adolescent's transitional schooling across two sociocultural contexts. *Journal of Language, Identity, and Education*, *9*, 107-123. doi: 10.1080/15348451003704792

Morita, N. (2004). Negotiating participation and identity in second language academic communities. *TESOL Quarterly, 38*, 573-603.

Nisbet, D. L., Tindall, E. R., & Arroyo, A. A. (2005). Language learning strategies and English proficiency of Chinese university students. *Foreign Language Annals, 38,* 100-107.

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House Publishers.

Oxford, R. L. (2011). *Teaching and researching: Language learning strategies*. New York: Pearson.

Oxford, R. L., & Burry-Stock, J. A. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the strategy inventory for language learning (SILL). *System, 23,* 1-23.

Pape, S. J., & Wang, C. (2003). Middle school children's strategic behavior: Classification and relation to academic achievement and mathematical problem-solving, *Instructional Science, 31*, 419-449.

Prior, P. A. (1998). *Writing/disciplinarity: A sociohistoric account of literate activity in the academy.* Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Schunk, D. H., & Zimmerman, B. J. (1997). Social origins of self-regulatory competence. *Educational Psychologist, 32,* 195-208.

Stevenson, H. W., & Stigler, J. W. (2006). The learning gap: Why our schools are failing and what we can learn from Japanese and Chinese education (2nd ed.). New York: Simon and Schuster.

Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social psychology,* 246-260.

Watkins, D. A., & Biggs, J. B. (Eds.). (2001). *Teaching the Chinese learner: Psychological and pedagogical perspectives.* Hong Kong: The University of Hong Kong Press.

Wang, C. (2004). *Self-regulated learning strategies and self-efficacy beliefs of children learning English as a second language.* (Unpublished doctoral dissertation, Ohio State University). Retrieved from http://drc.ohiolink.edu/handle/2374.OX/4603

Wang, C., Quach, L., & Rolston, J. (2009). Understanding English language learners' self-regulated learning strategies: Case studies of Chinese children in U.S. classrooms and home communities. In C. C. Park, R. Endo, S. J. Lee, & X. L. Rong (Eds.), *New perspectives on Asian American parents, students, and teacher recruitment* (pp.73-99). Charlotte, NC: Information Age Publishing.

Wong, J. S. (1950). *Fifth Chinese daughter*. New York: Harper & Brothers.

Wu, S., & Rubin, D. L. (2000). Evaluating the impact of collectivism and individualism on argumentative writing by Chinese and North American college students. *Research in the Teaching of English, 35*, 148-178.

Zhao, Y. (2009). *Catching up or leading the way: American education in the age of globalization*. Alexandria, VA: ASCD.

Zimmerman, B. J., & Martinez-Pons, M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal, 23,* 614-628.

Appendix

Self-Regulated Learning Strategies to Study English

Name (optional): Date: Gender: Male/Female

Years of Stay in the USA: Program of Study: Level of Study: Master's/Doctoral

Notes: Please circle one answer for each of the 40 statements according to your actual situation. As this is a survey about how Chinese graduate students study and use English in an American context and what concerns they may have about their English proficiency, there are no right or wrong answers for any choices. Additionally, not all the learning strategies listed here are good ones, and you may have your own preferred strategies. Nevertheless, the survey will help me better understand which strategies you actually use and the frequency you use them.

1	2	3	4
I never use it.	I seldom use it.	I sometimes use it.	I often use it.

The Statement of Self-Regulated Learning Strategies	Your Choice			
1. I write down the mistakes I make in my use of English.	1	2	3	4
2. I form an outline before writing my paper in English.	1	2	3	4
3. I review the English texts that I have read.	1	2	3	4
4. I take course notes in English.	1	2	3	4
I keep reading even when I encounter difficulties in my reading.	1	2	3	4
I ask others for help when I have questions with my English.	1	2	3	4
I search other sources when I have difficulties understanding an	1	2	3	4

English text.

8. I summarize the main idea of an article after I read it.	1	2	3	4
I listen to tape-recording of an English text several times if I cannot understand it for the first time.	1	2	3	4
10. I pay attention to what pronouns refer to in the text.	1	2	3	4
. I guess the meaning of new words by considering their contexts.	1	2	3	4
. I guess what people mean by following their facial expressions and movements when watching an English movie.	1	2	3	4
. I read or copy new words many times to memorize the spellings.	1	2	3	4
. I proofread my composition after I complete my writing.	1	2	3	4
. I pay attention to the stressed words or phrases to help me comprehend spoken English.	1	2	3	4
. I use Chinese symbols to mark the pronunciation of difficult English words.	1	2	3	4
. I use the title of an article to predict its content.	1	2	3	4
. I predict what other people will say next based on what they have already said.	1	2	3	4
. I look at a listener's facial expressions to check if he or she understands me or not.	1	2	3	4
. I imagine the scene described in the story to help me memorize what I have read.	1	2	3	4
21. I send emails to friends in English on my initiative.	1	2	3	4
. I compare and contrast any similarities and differences in usage	1	2	3	4

between English and Chinese.				
. I ask others to speak slowly if I cannot follow them.	1	2	3	4
. I try to find opportunities to practice my spoken English.	1	2	3	4
. I rehearse how to say something in English in my mind before saying it out loud.	1	2	3	4
26. I watch television programs in English on my initiative.	1	2	3	4
. I study new words by analyzing their prefixes and suffixes.	1	2	3	4
. I like to use different English expressions to state the same idea.	1	2	3	4
. I translate what I read into Chinese to help me comprehend it.	1	2	3	4
30. I pay attention to native English speakers' intonation.	1	2	3	4
. I adjust my reading speed according to the difficulty of the text.	1	2	3	4
. I use background knowledge to help me understand what I am reading.	1	2	3	4
33. I underline key points during my reading in English.	1	2	3	4
. I give a topic sentence in each paragraph in my writing.	1	2	3	4
. I check my writing to make sure that the rest of the paragraph supports the topic sentence.	1	2	3	4
. I use words just learned to make new sentences on my initiative.	1	2	3	4
. I speak English outside of my courses.	1	2	3	4
. I keep a personal journal in English.	1	2	3	4
. I read books in English not required by my class.	1	2	3	4
. I talk back in English when someone speaks English to me.	1	2	3	4

Additionally, please respond to the following four questions.

1. What are your thoughts about your English proficiency?
2. In what ways, if any, does your English affect your academic study?
3. If you could change any of your English skills, what are five most important things that you would like to change?

Table 1

Descriptive Statistics of 40 Self-Regulated Learning Strategies

Items	*n*	Min	Max	*M*	*SD*
I write down the mistakes I make in my use of English.	49	1.00	4.00	2.00	.87
I form an outline before writing my paper in English.	49	1.00	4.00	3.08	1.04
I review the English texts that I have read.	49	1.00	4.00	2.67	.92
I take course notes in English.	49	1.00	4.00	3.63	.76
I keep reading even when I encounter difficulties in my reading.	49	2.00	4.00	3.51	.54
I ask others for help when I have questions with my English.	49	1.00	4.00	3.14	.76
I search other sources when I have difficulties understanding an English text.	49	1.00	4.00	3.41	.84
I summarize the main idea of an article after I read it.	49	1.00	4.00	2.57	.89
I listen to tape-recording of an English text several times if I cannot understand it for the first time.	49	1.00	4.00	2.06	.94
I pay attention to what pronouns refer to in the text.	49	1.00	4.00	2.69	.82
I guess the meaning of new words by considering their contexts.	49	1.00	4.00	3.49	.74

I guess what people mean by following their facial expressions and movements when watching an English movie.	49	1.00	4.00	3.39	.84
I read or copy new words many times to memorize the spellings.	49	1.00	4.00	2.67	1.03
I proofread my composition after I complete my writing.	49	2.00	4.00	3.29	.76
I pay attention to the stressed words or phrases to help me comprehend spoken English.	49	1.00	4.00	2.90	.77
I use Chinese symbols to mark the pronunciation of difficult English words.	49	1.00	4.00	1.39	.79
I use the title of an article to predict its content.	49	1.00	4.00	3.08	.81
I predict what other people will say next based on what they have already said.	49	1.00	4.00	2.98	.90
I look at a listener's facial expressions to check if he or she understands me or not.	49	1.00	4.00	3.45	.68
I imagine the scene described in the story to help me memorize what I have read.	48	1.00	4.00	3.00	.92
I send emails to friends in English on my initiative.	49	1.00	4.00	2.94	.94
I compare and contrast any similarities and differences in usage between English and Chinese.	48	1.00	4.00	2.69	.75
I ask others to speak slowly if I cannot follow them.	49	1.00	4.00	3.14	.82
I try to find opportunities to practice my spoken English.	49	1.00	4.00	3.08	.76
I rehearse how to say something in English in	49	1.00	4.00	2.94	.77

my mind before saying it out loud.					
I watch television programs in English on my initiative.	49	1.00	4.00	2.86	.94
I study new words by analyzing their prefixes and suffixes.	49	1.00	4.00	2.76	.83
I like to use different English expressions to state the same idea.	49	1.00	4.00	2.76	.75
I translate what I read into Chinese to help me comprehend it.	49	1.00	4.00	2.43	.79
I pay attention to native English speakers' intonation.	49	1.00	4.00	3.10	.82
I adjust my reading speed according to the difficulty of the text.	49	2.00	4.00	3.31	.55
I draw on my background knowledge to help me understand what I am reading.	49	2.00	4.00	3.43	.61
I underline key points during my reading in English.	49	1.00	4.00	3.12	.93
I give a topic sentence in each paragraph in my writing.	49	1.00	4.00	2.90	.82
I check my writing to make sure that the rest of the paragraph supports the topic sentence.	49	1.00	4.00	2.98	.83
I use words just learned to make new sentences on my initiative.	49	1.00	4.00	2.59	.70
I speak English outside of my courses.	49	2.00	4.00	3.16	.80
I keep a personal journal in English.	49	1.00	4.00	1.96	.96
I read books in English not required by my class.	49	1.00	4.00	2.88	.83
	49	2.00	4.00	3.86	.46

I talk back in English when someone speaks English to me.	
Valid N (listwise)	45